

**Request for Coverage Under
Wisconsin Pollutant Discharge Elimination System (WPDES)
Wastewater Discharge Permit (WI-0046566-06) for
Contaminated Groundwater from Remedial Action Operations**
(Revised 8 / 2012)

Please type or print required information, except for the signature.

I. GENERAL INFORMATION

A: FACILITY LOCATION INFORMATION		
Name of Facility / Project Madison Kipp Corporation	Official Representative Onsite Alina Satkoski	Title Environmental and Safety Coordinator
(Address or Highway / Road with Distance and Direction from nearest City) 201 Waubesa Street	Telephone No.: 608-242-5200	Fax # 608-770-9401
City, State, Zip Code Madison, Wisconsin 53704	County Dane	Email Address asatkoski@madison-kipp.com

B: Individual, parent company, or organization with direct control over the facility. Enter full official legal name of the owner or parent company, if there is one, the mailing address, and the name and title of the official representative (responsible party) signing this application <u>if he/she is located at address of parent company.</u>		
Parent Company/Owner Madison Kipp Corporation	Company Contact Alina Satkoski	Title Environmental and Safety Coordinator
Mailing Address - PO Box, Street, or Route P.O. Box 8043	Telephone No.: 608-242-5200	Fax # 608-770-9401
City, State, Zip Code Madison, Wisconsin, 53704	Email Address asatkoski@madison-kipp.com	

C: Consulting Firm for Groundwater		
Company Name ARCADIS	Company Contact Jennine Trask, PE	Title Certified Project Manager
Mailing Address - PO Box, Street, or Route 126 N. Jefferson Street, Suite 400	Telephone No.: 414-276-7742	Fax # 414-276-7603
City, State, Zip Code Milwaukee, Wisconsin 53202	Email Address jennine.trask@arcadis-us.com	

D. Name of Person to Receive Discharge Monitoring Report Forms from Department:

E. Any Other Necessary Contact Person (name, phone, email)

Michael Schmoller, WDNR

F. DNR Environmental Response & Repair Project Number, and DNR Project Manager name:

BRRTS No. 02-13-001569, Facility ID 113125320, WDNR Project Manager Michael Schmoller



Infrastructure, environment, buildings

ARCADIS
126 North Jefferson Street
Suite 400
Milwaukee
Wisconsin 53202
Tel 414.276.7742
Fax 414.276.7603

Transmittal Letter

To:
Alan Hopfensperger
Wisconsin Department of Natural Resources
South Central Region
3911 Fish Hatchery Road
Fitchburg, WI 53711

Copies:
Mike Schmoller (electronic)
Alina Satkoski (electronic)
WDNR Water Permits Central
Intake – WT/3

From:
Rebecca Robbennolt

Date:
November 25, 2014

Subject:
WPDES Permit Application
Madison-Kipp Corporation

ARCADIS Project No.:
WI001368.0023

We are sending you:

☒ Attached

☐ Under Separate Cover Via _____ the Following Items:

☐ Shop Drawings

☐ Plans

☐ Specifications

☐ Change Order

☐ Prints

☐ Samples

☐ Copy of Letter

☐ Reports

☒ Other: Application

Copies	Date	Drawing No.	Rev.	Description	Action*
1	11/25/14		Final	WPDES Permit Application for the Groundwater Extraction and Treatment System Treated Discharge, Madison-Kipp Corporation Site, 201 Waubesa Street, Madison, WI.	Review FA

Action*

☐ A Approved

☐ CR Correct and Resubmit

☐ Resubmit _____ Copies

☐ AN Approved As Noted

☐ F File

☐ Return _____ Copies

☐ AS As Requested

☒ FA For Approval

☐ Review and Comment

☐ Other: _____

Mailing Method

☐ U.S. Postal Service 1st Class

☐ Courier/Hand Delivery

☐ FedEx Priority Overnight

☐ FedEx 2-Day Delivery

☐ Certified/Registered Mail

☐ United Parcel Service (UPS)

☒ FedEx Standard Overnight

☐ FedEx Economy

☐ Other: _____

Comments: Please find enclosed the *WPDES Permit Application for the Groundwater Extraction and Treatment System Treated Discharge* for the Madison-Kipp Corporation property located at 201 Waubesa Street in Madison, WI. If you have any questions, please contact me at your convenience (414) 276-7742. Thanks!

Rebecca

II. SPECIFIC INFORMATION ON PROJECT

A. Pollutants

1. The suspected **sources of the pollutants** (estimate of material release quantity and contributing activities)

Historical chemical usage at the Site included PCE and oil potentially containing PCBs, and current chemical usage includes chlorine, hydraulic oils, caustic solutions and Stoddard solvent. Chlorinated solvents, including PCE; petroleum hydrocarbons, hydraulic oil, and gasoline; PAHs and PCBs have been found to be present in soil and groundwater.

2. Check **all fuel and waste types** suspected in the contamination at this site:

- | | | |
|---|---|--------------------------------------|
| <input type="checkbox"/> Unleaded Gasoline | <input type="checkbox"/> Jet Fuel | <input type="checkbox"/> Pesticides |
| <input type="checkbox"/> Leaded Gasoline | <input checked="" type="checkbox"/> Waste Oil | <input type="checkbox"/> Fertilizers |
| <input checked="" type="checkbox"/> Diesel Fuel | <input checked="" type="checkbox"/> Solvents | |
| <input type="checkbox"/> Heating Oil | <input checked="" type="checkbox"/> Other: Polychlorinated Biphenyl | |

3. Check **all pollutants identified at this site**:

- | | |
|---|--|
| <input checked="" type="checkbox"/> BETX (Benzene, Ethylbenzene, Toluene, Xylene) | <input type="checkbox"/> Pesticides/Fertilizers |
| <input checked="" type="checkbox"/> PAHs (Polynuclear aromatic hydrocarbons) | <input type="checkbox"/> Total Recoverable Lead * |
| <input checked="" type="checkbox"/> VOCs (Volatile Organic Chemicals) | <input checked="" type="checkbox"/> Other <u>Polychlorinated Biphenyls</u> |

* Include upstream receiving water hardness analysis if lead is detected.

B. Treatment

1. Describe the existing treatment system:

This system will be constructed in winter 2014. One extraction well will pump groundwater at 45 gpm into a 2,000 gal holding tank. Water will then be mixed at the dosage specified in section 2 below in a 550 gal mixing tank. The water will then be pumped through an air stripper for treatment, followed by discharge to a storm structure.

Treatment Techniques Used

- | |
|---|
| <input checked="" type="checkbox"/> Pump & Treat |
| <input checked="" type="checkbox"/> Air stripping |
| <input type="checkbox"/> GAC (Granular Activated Carbon) |
| <input type="checkbox"/> Augmented Insitu Bioremediation
(with chemicals or nutrient addition) |
| <input type="checkbox"/> Other (describe) |

2. If any cleaning, softening or descaling of the treatment system

- a. Identify any additives that are proposed or being used for cleaning, softening, or descaling of the treatment system. Provide Material Safety Data Sheets, and describe dosage.

Hecla 1 anti-scalant at 30-60 ppm, approximately 2-4 gallons per day. MSDS attached.

- b. Describe what is done to clean, soften or descale, and how often it is done.

Hecla 1 will be introduced upstream of the air stripper at a continuous rate.

- c. Where is the reject water from cleaning and descaling discharged?

- ☒ same discharge point as treated effluent ☐ sanitary sewer ☐ other (please describe)

3. **Anticipated operating schedule** during the new permit term (2012 – 2017)

Continuous 24/7 operation beginning February, 2015.

4. **Anticipated flowrate** (in gpm), and total volume of treated water to be discharged per month:

45 gpm flowrate. 1,944,000 gallons monthly treated discharge.

5. Effluent discharge point location:

Storm structure AS5940-0049. See attached Figure 1 - Site Layout.

6. Is an air permit from the DNR air management program required? If not, why not.

An air permit is not required. Contaminants in the vapor phase will be treated using vapor granular activated carbon and monitored in accordance with NR 445.

III. DISCHARGE MANAGEMENT PLAN UPDATE

Include the following information:

1. A summary of analytical results for contaminants detected at the site.

See attached Table 1 Summary of Groundwater Analytical Results 2012 to 2014.

2. Results from the most recent volatile organic compounds (VOC) scan, including methods used and detection levels.

A full round of water samples was collected from 36 Site monitoring wells and 4 multiport wells in April 2014. Groundwater samples were submitted for VOCs analyzed using United States Environmental Protection Agency (U.S. EPA) SW-846 Method 8260B. A summary of the April 2014 groundwater results is included in the attached Table 1 Summary of Groundwater Analytical Results 2012 to 2014. The groundwater results are compared to the ch.NR 140 preventive action limits (PALs) and enforcement standards (ESs).

3. Results from an analysis of the poly-nuclear aromatic hydrocarbons (PAHs) shown on the right, including methods used and detection levels (unless PAH data are already submitted)

The lab needs to reach the lowest detection level achievable for each parameter because of the low limit for total PAHs. EPA test method SW-846 8310 is recommended.

benzo(a)anthracene	dibenzo(a,h)anthracene
benzo(a)pyrene	fluoranthene
benzo(b)fluoranthene	indeno(1,2,3-cd)pyrene
benzo(g,h,i)perylene	naphthalene
benzo(k)fluoranthene	phenanthrene
chrysene	pyrene

See Table 1 Summary of Groundwater Analytical Results 2012 to 2014 (attached).

4. Contaminants proposed for periodic monitoring and demonstration of why any monitoring required in the permit should be exempted due to low level of contaminants in the wastewater discharge.

See Table 1 Summary of Groundwater Analytical Results 2012 to 2014 (attached).

5. Information to support request for any alternate effluent limit for discharges to groundwater (Part 5 of permit) or request for temporary exemption for in-situ discharges (Part 6 of permit).

Not Applicable

6. Plans and specifications for the proposed treatment system identifying sampling points. For supplier furnished package treatment units, only a flow diagram, design summary, and unit sizing calculations are

required.

Please see attached Figure 1: Site Layout for proposed discharge location. For a flow diagram and design summary, see attached Groundwater Extraction and Treatment System Drawings. Air stripper modeling is summarized in Table 2 – Air Stripper Removal Efficiency. Additionally, a Basis of Design was submitted to the WDNR on April 1, 2014.

7. **General description of operations**, identifying operational tasks, who is responsible to do that task, and how frequently the task is done (particularly needed at pump & treat systems).

Madison-Kipp will complete the following Operational Monitoring and Maintenance tasks:

- Cleaning of air stripper trays per manufacturer's recommendations.
- Oil and grease equipment motors per manufacturer's recommendations.
- Replace anti-scalant drums as needed.
- Daily monitoring of system components.
- Collection of treated effluent for monitoring per WPDES requirements.

8. A **site plan** that identifies general land uses, underground storage tanks and pipelines, groundwater monitoring and recovery wells, contaminant plume definition and zone of influence, other known spills in the area, septic tanks and drain fields, separation distances to potable water supply wells and residences, and other pertinent information.

See attached Figures 2-11 for existing well locations and contaminant plumes.

9. A **detailed map** of the discharge location, showing if discharge is direct or via a storm sewer or other conveyance. Indicate distance from site to discharge location and other impacted water bodies or wetlands.
- If a city storm sewer is used, approval from the municipality is required.
 - If a new outfall structure is proposed, the plans should identify the outfall and incorporate appropriate erosion control methods. A permit for riprap projects (available at most DNR offices) should be obtained.
 - Wetland discharges are not allowed unless they meet wetland protection requirements of Ch. NR 103, Wis. Admin. Code.

See attached Figure 1: Site Layout for proposed discharge location. The groundwater extraction and treatment system discharge will discharge to storm structure AS5940-0049. This discharges to the Stark Weather Creek, flowing to Lake Monona in the Rock River Basin. This discharge has been conditionally approved to this location by the Dane County Department of Health as non-stormwater discharge.

III. SIGNATURES

A. Signature of person completing the form, attesting to the accuracy and completeness of the statements made.

<u>Rebecca A. Rabbenolt</u>	<u>Remediation Specialist</u>	<u>11/25/14</u>
Name <u>ARCADIS</u>	Title	Date Signed
<u>126 N. Jefferson St Suite 400 Milwaukee Wisconsin 53802</u>	<u>rebecca.rabbenolt@arcadis-us.com</u>	<u>414-277-6208</u>
Address	Email	Telephone Number

B. This application must be signed by the official representative of the permitted facility (responsible party) who is: the owner, the sole proprietor for a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government, or an executive officer of at least the level of vice president for a corporation, having overall responsibility for the operation of the facility. If the application is not signed, or is found to be incomplete, it will be returned.

<u>Anthony C. Kobunski</u>	<u>PRESIDENT + CEO</u>
Typed or Printed Name of Official Representative	Title
<u>[Signature]</u>	<u>11/25/14</u>
Signature of Official Representative	Date Signed

Submit this General Permit Request for Coverage:

Department of Natural Resources,
Water Permits Central Intake - WT/3,
P.O. Box 7185,
Madison, WI 53707-7185.

The decision on whether to cover this discharge under the remediation general permit will be made by regional DNR wastewater staff. Upon receipt in Madison, this application will be forwarded to the appropriate regional staff person.

A copy of the submittal should also be sent to the Department Remediation & Redevelopment Project Manager.
Watershed Central: \General Permits\Reissue Docs\Grv Remediation\Request For Coverage 2012.doc

**WPDES Section II.
Part B. Treatment
2. Descaling**

Hecla 1 MSDS

MATERIAL SAFETY DATA SHEET

HECLA 1

Latest Revision Date...12/10/12

Print Date.....12/10/12

SECTION 1

MANUFACTURER INFORMATION

QUES INDUSTRIES, INC.

5420 W. 140TH STREET

CLEVELAND, OHIO 44142

PH (216) 267-8989 FAX (216) 267-8998

FOR CHEMICAL EMERGENCY

CALL INFOTRAC @ 1-800-535-5053

24 HRS/DAY, 7 DAYS/WEEK

SECTION 2

PRODUCT IDENTIFICATION

PRODUCT NUMBER..... Q HECLA1

TRADE NAME OR CHEMICAL NAME... HECLA 1

SYNONYMS..... NA

CHEMICAL FAMILY..... Polymer Blend

NFPA - HEALTH HAZARD..... 2

FIRE HAZARD..... 0

REACTIVITY HAZARD..... 0

NFPA SCALE..... 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant

KEY..... NA= Not Applicable ND= Not Determined

SECTION 3

HAZARDOUS INGREDIENTS

CHEMICAL NAME(S)	CAS NUMBER	% WT	TLV-TWA	PEL	SEC.313	CARCINOGEN?
None	NA	NA	NA	NA	No	NA

SECTION 4

SHIPPING DATA

D.O.T. PROPER SHIPPING NAME... NA

D.O.T. HAZARD CLASS..... NA

D.O.T. LABELS REQUIRED..... NA

UN/NA I.D. NUMBER..... NA

PACKAGING GROUP..... NA

NON-BULK SHIPPING NAME..... Compound, Industrial Process Water Treating, Liquid

BULK SHIPPING NAME..... Same

SECTION 5

PHYSICAL DATA

BOILING/FREEZING POINT @760 mmHg... ND / ND

pH..... 5.1

VAPOR PRESSURE mm Hg @20° C..... ND

VAPOR DENSITY (Air = 1)..... >1

PERCENT VOLATILE BY WEIGHT (%)..... 50

SPECIFIC GRAVITY @20°C..... 1.25

SOLUBILITY IN WATER..... Complete

EVAPORATION RATE..... (BuAc=1) <1

APPEARANCE AND ODOR..... Clear yellow to amber liquid with mild odor.

SECTION 6

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Test Method)..... NA

AUTOIGNITION TEMPERATURE..... NA

FLAMMABILITY LIMITS IN AIR (% V).... NA

HECLA 1

SECTION 6

FIRE AND EXPLOSION HAZARD DATA

CONT'D

EXTINGUISHING MEDIA..... Not combustible
SPECIAL FIRE FIGHTING PROCEDURES... NA
UNUSUAL FIRE & EXPLOSION HAZARDS... Cool drums exposed to heat or fire to prevent steam rupture.

SECTION 7

REACTIVITY DATA

PRODUCT STABILITY..... Stable
Conditions to Avoid..... None Known
CHEMICAL INCOMPATIBILITY..... Strong Oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS... None known
HAZARDOUS POLYMERIZATION..... Will Not Occur

SECTION 8

HEALTH HAZARD DATA

SKIN CONTACT... Prolonged or repeated contact may cause irritation.
EYE CONTACT.... May cause eye irritation upon contact.
INHALATION..... High concentration of mists or vapors may cause respiratory system irritation.
INGESTION..... Harmful if swallowed.

SECTION 9

EMERGENCY AND FIRST AID PROCEDURES

SKIN..... Remove contaminated clothing and flush exposed skin with soap and water. If irritation persists or develops, get medical attention. Launder contaminated clothing before reuse.
EYES..... Immediately flush eyes with large amounts of water for 15 minutes and get medical attention.
INGESTION... If swallowed, get medical attention immediately. Never give anything by mouth to an unconscious person.
INHALATION... Move to fresh air. Aid in breathing, if necessary, and get medical attention.

SECTION 10

ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES... Avoid skin contact. Neutralize and absorb with sand or inert material. Place in suitable container for disposal. Flush neutralized residues to sanitary sewer.
WASTE DISPOSAL METHOD..... Dispose of in accordance with all federal, state and local regulations.
HAZARDOUS WASTE 40CFR261... NA
CONTAINER DISPOSAL..... Empty containers may contain residuals. Thoroughly clean, then offer for recycling, reuse, or disposal in accordance with governmental regulations.

SECTION 11

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION..... NIOSH/MSHA approved filter type mask for dusts, fumes and mists as needed to maintain P.E.L.
VENTILATION..... Local and/or mechanical exhaust to maintain exposure below P.E.L.
PROTECTIVE CLOTHING..... Neoprene gloves, apron, boots - as necessary to prevent skin contact.
EYE PROTECTION..... Chemical goggles.
OTHER PRECAUTIONS..... Safety shower and eyewash fountains should be easily accessible.

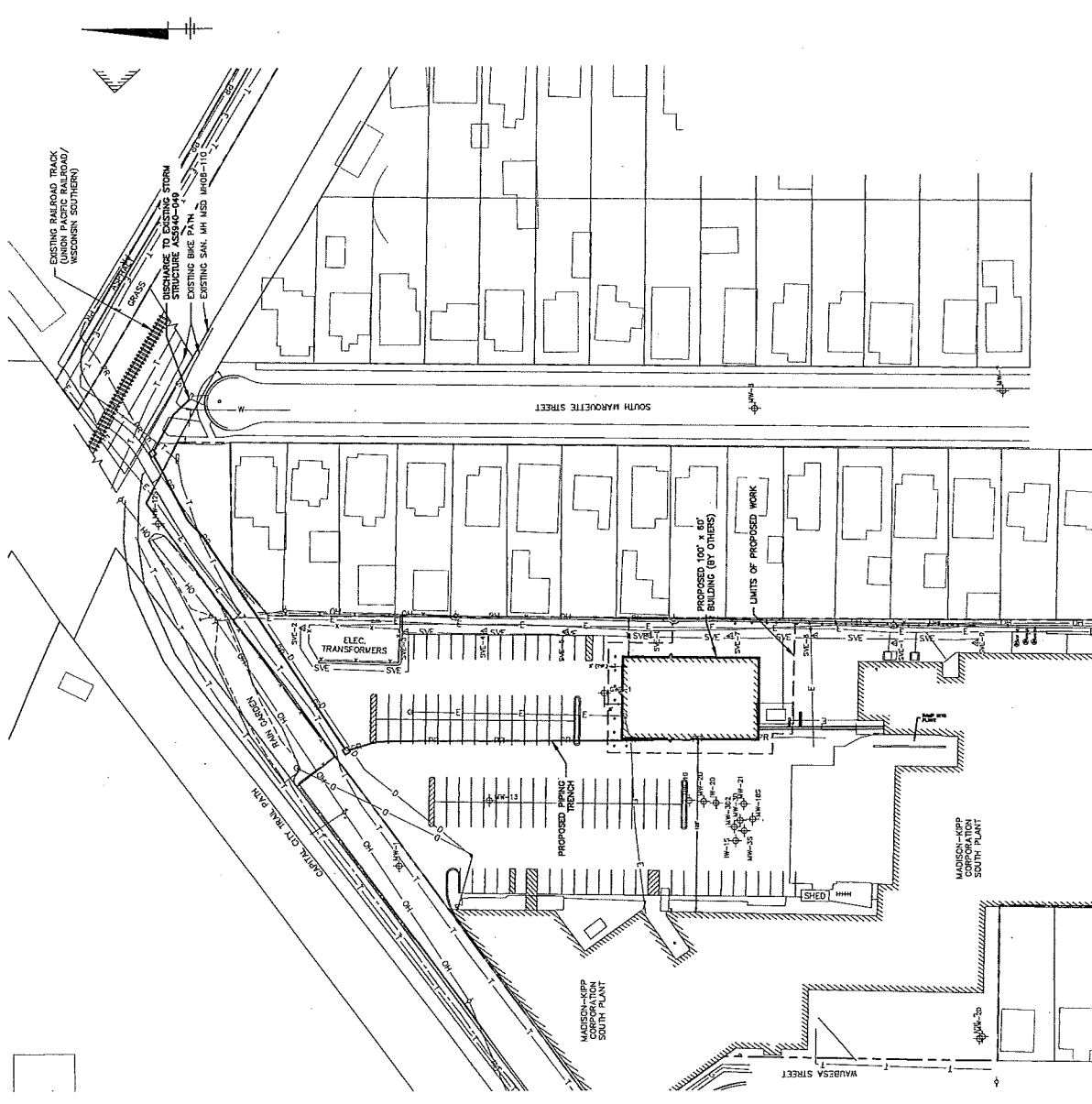
SECTION 12

SUPPLIER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of manufacturer. The data on this sheet relates only to the specific material designated herein. Manufacturer assumes no legal responsibility for use or reliance upon this data.

**WPDES Section II.
Part B. Treatment
3. Discharge Location**

Figure 1 – Site Layout

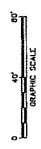


LEGEND:

- PROPOSED BUILDING (BY OTHERS)
- EXISTING MADISON-KIPP PROPERTY BOUNDARY
- DETAIL REFERENCE NUMBER
- DRAWING REFERENCE NUMBER
- EXISTING MONITORING WELL
- EXISTING SVE WELL
- EXISTING FENCE
- EXISTING PROPANE (OUT OF SERVICE)
- EXISTING STORM DRAIN
- EXISTING ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING FIBER OPTIC/CATV
- EXISTING TELEPHONE
- EXISTING SANITARY SEWER

NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO THE START OF WORK.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE APPROXIMATE AND BASED ON CURRENT CONDITIONS. ADDITIONAL EROSION CONTROL MEASURES MAY BE NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
3. TRUCK TRAFFIC SHALL ENTER FROM WAUBESA STREET. CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES. TRUCKS SHALL BE EQUIPPED WITH WHEELWASHES. TRUCKS SHALL NOT ENTER OR EXIT THE SITE AT ANY OTHER LOCATION. TRUCKS SHALL NOT ENTER OR EXIT THE SITE AT ANY OTHER LOCATION. TRUCKS SHALL NOT ENTER OR EXIT THE SITE AT ANY OTHER LOCATION.
4. TEMPORARY CONTROLS SHALL BE MAINTAINED BY THE CONTRACTOR. DAMAGED OR DISTURBED CONTROLS SHALL BE REPLACED THE SAME WORKING DAY.
5. PAVEMENT RESTORATION SHALL BE COMPLETED BY THE OWNER UPON COMPLETION OF THE PROJECT. THE OWNER SHALL MAINTAIN EROSION CONTROL MEASURES UNTIL RESTORATION IS COMPLETED.
6. ACCESS TO THE GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SHALL BE MAINTAINED AT ALL TIMES. THE OWNER SHALL MAINTAIN EROSION CONTROL MEASURES UNTIL RESTORATION IS COMPLETED.



MADISON-KIPP CORPORATION
MADISON, WISCONSIN
MADISON-KIPP BUILDING DESIGN

SITE LAYOUT

